

REMARKS

Reconsideration of the restriction requirement in the above referenced application is respectfully requested.

Allowed Claims 7-15

Applicants note with appreciation the allowance of claims 7-15.

Amendments to Specification

Minor corrections have been made to the specification. Additionally, at page 37, add a new paragraph was added after the paragraph ending at line 17. Basis for this paragraph is original claim 7. This paragraph was added to make the specification in conformity with the claim. Entry of this amendment is respectfully requested.

35 U.S.C. '112

The disclosure was objected to because of the following informalities: - On page 2, line 24, the phraseology "52 EC" is unclear.

Applicants noted that throughout the specification the degree sign "°" was erroneously printed out as "E". Accordingly, applicants have amended the specification as shown above to correct "EC" where it appears in the specification to "°C". Entry of the apparent and inadvertent error is respectfully requested.

For the above reasons, entry of the recited amendments and withdrawal of the rejections under 35 U.S.C. ' 112 is respectfully requested.

Amendments to Claims

Claim 1 has been cancelled.

Claim 2 has been amended to delete the limitation related to the location of the addition of ammonia; and was amended to depend from claim 5.

Claim 4 has been amended to depend from claim 4.

Claim 5 has been amended to be placed in independent form and further incorporate the limitation of claim 6 which has been cancelled. Basis is also at Figure 14C and the corresponding description at page 31.

Claim 6 has been cancelled.

Claim 11 was amended to replace "EC" with "°C" for the same reasons this amendment was made to the specification.

Claim 12 was amended to correct "oxides" to "oxide", and to further clarify that the NO₂ reacts with the soot and reduces to NO. (Spec. page 32, lines 10-11).

Claim 16 was amended to replace "EC" with "°C" for the same reasons this amendment was made to the specification.

Rejection Under 35 USC ' 102(b) or 35 USC ' 102(e)

Claims 1-6 and 16-20 have been rejected under 35 USC ' 102(b) as being anticipated by U.S. Patent No. 5,809,774 (Peter-Hoblyn '774), or under 35 USC ' 102(e) as being anticipated by U.S. Patent No. 6,051,040 (Peter-Hoblyn '040).

For the reasons that follow Claims 1-6 and 16-20 are not anticipated by Peter-Hoblyn '774 or Peter-Hoblyn '040.

U.S. Patent No. 5,809,774 (Peter-Hoblyn '774)

Peter-Hoblyn '774 is cited as anticipating claims 1-6 and 16-20 for the reasons presented in the Office Action dated March 26, 2003 at pages 3-5.

For the reasons that follow these claims are not anticipated or obvious based on the disclosure in Peter-Hoblyn '774.

Claim 1 has been cancelled, and claim 5 has been put into independent form, generally including the limitations of claim 6. Amended claims 2-5 are directed to a system and where there is a catalyzed soot filter, followed an SCR catalyst. There is a means to add a reducing agent upstream of the soot filter. The catalyzed soot filter and SCR catalyst is formed as single brick, the brick having an upstream catalyzed soot filter portion and a downstream SCR catalyst portion.

Peter-Hoblyn '774 does not disclose a means to add a reducing agent upstream of a single brick which comprises a catalyzed soot filter and an SCR catalyst as presently claimed in claims 2-5. The Examiner cites Peter-Hoblyn '774 at col. 6, lines 62-67; col 7, lines 1-25. This disclosure is directed a description of the reducing agent. The Figures and corresponding description of Peter-Hoblyn '774 discloses the reducing agent added upstream of the item located at reference character 50 (170 or 250). At columns 11 and 12 where Peter-Hoblyn '774 discloses a catalyzed soot filter it is located at the position of 50. In view of the focus of the Peter-Hoblyn '774 disclosure there would be no motivation of one skilled in the art to disclose a means to add a reducing agent upstream of a single brick which comprises a catalyzed soot filter followed by a SCR catalyst.

There is no disclosure or suggestion of the embodiment of claim 5 in Peter-Hoblyn '774. With regard to claim 6, now incorporated into amended claim 5, the Examiner has cited Peter-Hoblyn '774 at col. 7, lines 25-67; col. 8, lines 1-67; col.9, lines 1-25. However, there is no disclosure in Peter-Hoblyn '774 of the use of a soot filter and the SCR catalyst being on the same brick.

Claims 16-20 are directed to a method for treating exhaust gas, as claimed, by passing the gas through a soot filter to increase the NO₂ concentration present in the NO_x gases, "without passing said gases through any catalyzing device prior to entering said catalyst soot filter". This is followed by metering an ammonia reductant into said

exhaust gas after the gas exits the soot filter. The gas is then passed to an SCR catalyst.

Peter-Hoblyn '774 is cited at col. 7, lines 25-67; col. 8, lines 1-67; col.9, lines 1-25; and cols. 12-14, lines 1-67 in rejecting claims 16-20. Applicant's note that with regard to the rejection of claim 16 at these citations, reference is made to the embodiments of Peter-Hoblyn '774 which have the reductant fed in upstream of the soot filter. At col. 12 lines 7-48 Peter-Hoblyn '774 discloses the a precatalyzed trap "upstream of the SCR catalyst and urea introduction zone" (Col. 12, lines 33-35). However, there is no recognition of the present requirement of having such a system where the urea is introduced "without passing said gases through any catalyzing device prior to entering said catalyst soot filter" as recited in present claim 16, and claims 17-20 depending therefrom.

Accordingly, Peter-Hoblyn '774 does not disclose or suggest the invention of present claims 2-5 and 16-20.

U.S. Patent No. 6,051,040 (Peter-Hoblyn '040)

Peter-Hoblyn '040 is cited as anticipating claims 1-6 and 16-20 for the reasons presented in the Office Action dated March 26, 2003 at pages 5-7.

For the reasons that follow these claims are not anticipated or obvious based on the disclosure in Peter-Hoblyn '040. Initially, reference is made to the above review of the present invention.

Amended claims 2-5 are directed to a system and where there is a catalyzed soot filter, followed an SCR catalyst. There is a means to add a reducing agent upstream of the soot filter. The catalyzed soot filter and SCR catalyst is formed as single brick, the brick having an upstream catalyzed soot filter portion and a downstream SCR catalyst portion.

Peter-Hoblyn '040 does not disclose a means to add a reducing agent upstream of a single brick which comprises a catalyzed soot filter and an SCR catalyst as presently claimed in claims 2-5.

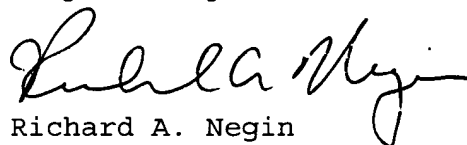
Claims 16-20 are reviewed above. Peter-Hoblyn '040 does not disclose metering the reductant to the exhaust gas downstream of the soot filter. Figures 1 and 2 of Peter-Hoblyn '040 add reductant upstream of the soot filter. Additionally, he does not recognize the present requirement of passing the gas through a soot filter "without passing said gases through any catalyzing device prior to entering said catalyst soot filter".

For the above reasons, withdrawal of the rejections under 35 U.S.C. '102 is respectfully requested.

Entry of the above amendment, withdrawal of the rejections under 35 USC ' 112, and 35 USC ' 102, and 35 USC ' 103 and allowance of claims 1-6 and 16-20 is respectfully requested.

Applicants submit their application is in condition for allowance and respectfully request the same. Should the Examiner have any further questions or require further clarification, the Examiner is invited to telephone the undersigned at the number given below.

Respectfully submitted,



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